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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/548,730	04/13/2000	Karim M. T. Lefki	PHN-17.383	7170

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EXAMINER

FARAH, AHMED M

ART UNIT PAPER NUMBER

3739

DATE MAILED: 05/14/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 17

Application Number: 09/548,730

Filing Date: April 13, 2000

Appellant(s): Lefki et al.

William T. Ellis

Registration No. 26,874

For Appellant

Art Unit: 3739

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 24, 2003.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

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(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-16 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

5,653,706	Zavislan et al.	08-1997
6,074,382	Asah et al.	06-2000

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 6, 9, 10, 12, and 14-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Zavislan et al. U.S. Patent No. 5,653,706 in view of Asah et al. U.S. Patent No. 6,074,382. This rejection is set forth in prior Office Action, Paper No. 10.

As to claims 1, 12, and 15, Zavislan et al. (U.S. Patent No. 5,653,706) disclose a hair removing system with electronic visualization of the area being treated. As described in the instant application, the device of Zavislan et al., which is designed for use by a professional individual, comprises:

- a) a laser source [laser source 20, which provides a laser beam that is well absorbed by the tissue being treated (see Fig. 1)],
- b) an adjustable laser beam manipulator for positioning a laser beam supplied by the laser source during operation in a target position on a skin to be treated [handpiece 10, which projects and scans a treatment laser beam 12 and an illumination/visualization light to the treatment area 16 (see Col. 3, lines 38-49)],
- c) an image sensor for detecting an image of at least a portion of the skin [CCD camera 48, which provides a visual image of the treatment area (see Col. 4, lines 11-15 and Col. 5, lines 40-43)], and
- d) an electrical control unit, which controls the system during operation [control means 24 in which the user can operate, manipulate, or guide the laser beam over a desired treatment area (see Figs. 1 and 8; Col. 4, lines 22-26; and Col. 6, lines 25-30)].

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As to claims 6, 9, and 16, the control unit of Zavislan et al. determines the **exit position** (the position hair issues from the skin) of the hair to be removed from a region on the skin below which a root of the hair is present [the hair follicle is visualized/imaged and laser energy is focussed on the hair follicle as presently claimed (see Col. 4, lines 55-57)].

As to claim 10, the device of Zavislan et al. Further includes a separate illumination member for illuminating at least the portion of the skin being examined [illumination member 52 (see Fig. 7 and Col. 5, line 61-63)].

As to claim 14, Zavislan et al. teach that while determining the actual position of the laser beam on the skin, the control unit activates the laser source at a comparatively low energy density [the laser energy is focused into a spot within the tissue. At first, the spot is of sufficiently small size so that the energy density is sufficient to provide treatment effect within the tissue without damaging the surface tissue. Secondly, after the treatment locations are accurately determined, the physician may increase the power of the treatment laser as presently claimed (see lines 6-8 and 26-29 of the abstract)]

However, the system of Zavislan et al. is user controlled. Thus, their system is not electronically/automatically controlled by the combination of the controller and the image sensor in a manner similar to that of the instant claims.

Asah et al. (U.S. Patent No. 6,074,382) teach an alternative hair removal system comprising a light emitter for emitting a treatment light (Col. 3, lines 58-60); a detector for detecting at least one tissue parameter at the target site (Col. 3, lines 25-33); and a controller for controlling at least one parameter of the treatment light (the abstract and Col. 4, lines 27-63).

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They further state that “without control of tissue treatment, removal of hair is a difficult task to perform” as large number of hair follicles have to be pinpointed by the operator (see Col. 8, lines 6-20). Due to this difficulty, Asah et al. automate their system so that the imaging system determines the position of hair follicles from information contained in the image received from the treatment area, and in turn controls the irradiation of the treatment light based on said information. It is clear from the above statement that Asah et al. address the very deficiency in which the applicant claims to solve.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the applicant’s invention to modify Zavislan et al. in view of Asah et al. to automate the hair removal device, as suggested by Asah et al., in order to reduce the duration needed for the removal of all hairs. This would further enable untrained individuals and/or a patient to use the system.

In this Office Action, the Examiner withdraws the prior art rejections of claims 2-5, 7, 8, 11, and 13. Hence, claims 2-5, 7, 8, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims

(11) Response to Argument

A. The applicant argues that U.S. Patent ‘382 to Asah et al. is directed to a device for detecting the location of the hair follicle with “no disclosure of an algorithm.” He further

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argues that the prior art of record fails to teach or suggest a “control unit to determine the target position of the laser beam as a function of a position and/or orientation on the skin of a hair, and not a follicle.”

1. In response this argument, Asah et al. disclose an automated system for detecting the location of the hair follicle as recognized by the applicant. However, although they do not particularly teach detecting a hair without first detecting a hair follicle, the examiner’s position is that: **if one detects the position of a hair follicle, the position/location of the hair issuing from such follicle is inherently detected**. Furthermore, a hair will not grow out of skin tissue without a hair follicle. Therefore, the patent of Asah et al. teaches the claimed limitation.

2. As to the argument that Asah et al. fail to disclose an algorithm for determining the relative positions of the laser beam and the target position, the applicant’s independent claims 1 and 15 (and all the rejected claims thereafter) fail to teach an algorithm as stated in the arguments.

B. The applicant further addresses the difference between hair and a hair follicle. To support his position, he presents the definition of the term ‘**follicle**’ as defined in The American Heritage® Dictionary of the English language, Fourth Edition. Copyright © 2000 by Houghton Mifflin Company.

In response to this argument, The American Heritage® Dictionary of the English language, Third Edition. Copyright © 1992 by Houghton Mifflin Company, defines the term “**hair follicle**” as:

A tubular infolding of the epidermis containing the root of a hair.

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Furthermore, claims 6 and 9, of the instant application clearly teach that **the detected tissue is the hair root**. Again, the Examiner's position is that: if one detects the position of a hair follicle, the position/location of the hair issuing from such follicle is inherently detected.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

A. Farah



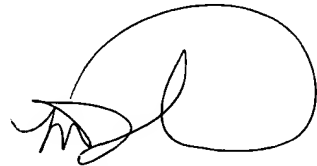
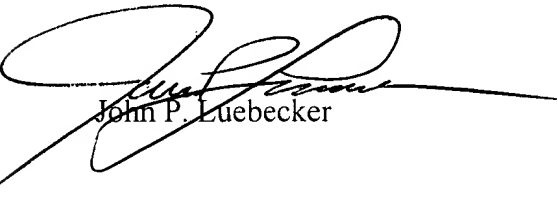
December 6, 2001

Conferees

David M. Shay



John P. Luebecker



LINDA C. M. DVORAK
SUPERVISORY PATENT EXAMINER
GROUP 3700

Advisory Action

Application No.
09/548,730

Applicant(s)
Lefki et al.

Examiner
A. Farah

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3739



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED Feb 24, 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b)]

- a) ☒ The period for reply expires two months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see NOTE below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: _____
- Claim(s) objected to: 2-5, 7, 8, 11, and 13
- Claim(s) rejected: 1, 6, 9, 10, 12, and 14-16
- Claim(s) withdrawn from consideration: _____
8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____

Office Action Summary

Application No.
09/548,730

Applicant(s)
Lefki et al.

Examiner
A. Farah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 24, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 9, 10, 12, and 14-16 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7, 8, 11, and 13 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: